

Notice of Allowability

Application No.

10/622,774

Examiner

Vinod Kumar

Applicant(s)

HILDEBRAND ET AL.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/19.2007 and interview of 11/16/07.
2. ☒ The allowed claim(s) is/are 38-47.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>SAME</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 19, 2007 has been entered.

Status of Objections and Rejections

2. All previous claim objections and rejections have been withdrawn in view of Examiner's amendment as set forth below.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Amer Ahmed (Reg. No. 58,985) on November 16, 2007.

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In the claims:

Claims 20-23, and 25-37 have been canceled.

Claim 38. (New) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of: (a) the nucleotide sequence of SEQ ID NO: 1; (b) the nucleotide sequence which is the full-length complement of (a); and (c) a nucleotide sequence which hybridizes under high stringency conditions to the complement of SEQ ID NO: 1, wherein said high stringency conditions comprise a wash in 0.2X SSC at 65 °C for 15 minutes, and wherein said nucleotide sequence encodes a protein having delta 12-fatty acid epoxxygenase activity.

Claim 39. (New) A chimeric DNA construct comprising the isolated nucleic acid molecule of claim 38 operably linked to at least one regulatory sequence that allows the expression of the nucleic acid molecule in a host cell.

Claim 40. (New) The chimeric DNA construct according to claim 39 wherein the at least one regulatory sequence allows expression of the nucleic acid molecule in a bacterial, fungal, insect or plant seed cell.

Claim 41. (New) The chimeric DNA construct according to claim 39 wherein the at least one regulatory sequence is a phaseolin promoter.

Claim 42. (New) A vector comprising the chimeric DNA construct according to claim 39.

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Claim 43. (New) A transformed host cell comprising an isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of: (a) the nucleotide sequence of SEQ ID NO: 1; (b) the nucleotide sequence which is the full-length complement of (a); and (c) a nucleotide sequence which hybridizes under high stringency conditions to the complement of SEQ ID NO: 1, wherein said high stringency conditions comprise a wash in 0.2X SSC at 65 °C for 15 minutes, and wherein said nucleotide sequence encodes a protein having delta 12-fatty acid epoxygenase activity.

Claim 44. (New) An isolated host cell comprising a vector which comprises an isolated nucleic acid molecule having a nucleotide sequence selected from the group consisting of: (a) the nucleotide sequence of SEQ ID NO: 1; (b) the nucleotide sequence which is the full-length complement of (a); and (c) a nucleotide sequence which hybridizes under high stringency conditions to the complement of SEQ ID NO: 1, wherein said high stringency conditions comprise a wash in 0.2X SSC at 65 °C for 15 minutes, and wherein said nucleotide sequence encodes a protein having delta 12-fatty acid epoxygenase activity, and wherein the nucleotide sequence is operably linked to at least one regulatory sequence that allows the expression of the nucleotide sequence in the host cell.

Claim 45. (New) The host cell of claim 44 wherein the host cell is selected from the group consisting of yeast, bacterium, insect and plant seed cell.

Claim 46. (New) A transgenic plant seed cell comprising an isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of: (a)

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the nucleotide sequence of SEQ ID NO: 1; (b) the nucleotide sequence which is the full-length complement of (a); and (c) a nucleotide sequence which hybridizes under high stringency conditions to the complement of SEQ ID NO: 1, wherein said high stringency conditions comprise a wash in 0.2X SSC at 65 °C for 15 minutes, and wherein said nucleotide sequence encodes a protein having delta 12-fatty acid epoxygenase activity.

Claim 47. (New) A transgenic plant seed cell comprising a vector which comprises an isolated nucleic acid molecule having a nucleotide sequence selected from the group consisting of: (a) the nucleotide sequence of SEQ ID NO: 1; (b) the nucleotide sequence which is the full-length complement of (a); and (c) a nucleotide sequence which hybridizes under high stringency conditions to the complement of SEQ ID NO: 1, wherein said high stringency conditions comprise a wash in 0.2X SSC at 65 °C for 15 minutes, and wherein said nucleotide sequence encodes a protein having delta 12-fatty acid epoxygenase activity, and wherein the nucleotide sequence is operably linked to at least one regulatory sequence that allows the expression of the nucleotide sequence in the plant seed cell.

Applicants authorized to cancel claims 20-23, and 25-37.

The above amendments were made to obviate potential issues under 35 U.S.C. 112, 1st and 2nd paragraphs.

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Conclusions

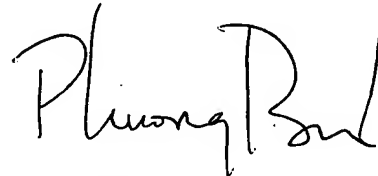
4. Claims 38-47 are allowed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod Kumar whose telephone number is (571) 272-4445. The examiner can normally be reached on 8.30 a.m. to 5.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PHUONG T. BUI
PRIMARY EXAMINER